THAT WHICH IS CLAIMED:

1. A method for controlling a water jet sharpening sequence of a pulpstone in at least one of a piston-loaded pulp grinder and a chain-feed pulp grinder, wherein at least one sharpening water jet of a water sharpening apparatus, arranged with respect to the pulp grinder, is directed toward a surface of the pulpstone, the at least one sharpening water jet having a treatment pressure capable of detaching material from at least a portion of the surface of the pulpstone, whereby the surface of the pulpstone is treated over the width thereof as the pulpstone is rotated, said method comprising:

determining an actual quality value of at least one variable of a fiber pulp ground by the at least one of the piston-loaded pulp grinder and the chain-feed pulp grinder;

defining a target quality value for each of the at least one variable;

directing the actual quality value and the corresponding target quality value to a control unit of the water sharpening apparatus, the control unit being configured to be responsive thereto so as to provide an adjustment strategy, including a control range, for controlling the water jet sharpening sequence;

controlling the treatment pressure of the sharpening water jet relative to an error value between the target quality value and the corresponding actual quality value of the fiber pulp; and

controlling a treatment interval to maintain the treatment pressure within the control range in accordance with the adjustment strategy.

2. A method for controlling a water jet sharpening sequence of a pulpstone in at least one of a piston-loaded pulp grinder and a chain-feed pulp grinder, wherein at least one sharpening water jet of the water sharpening apparatus, arranged with respect to the pulp grinder, is directed toward a surface of the pulpstone, the at least one sharpening water jet having a treatment pressure capable of detaching material from at least a portion of the surface of the pulpstone, whereby the surface of the pulpstone is treated over the width thereof as the pulpstone is rotated, said method comprising:

determining an actual quality value of at least one variable of a fiber pulp ground by the at least one of the piston-loaded pulp grinder and the chain-feed pulp grinder;

defining a target quality value for each of the at least one variable;

directing the actual quality value and the corresponding target quality value to a control unit of the water sharpening apparatus, the control unit being configured to be responsive thereto so as to provide an adjustment strategy, including a control range, for controlling the water jet sharpening sequence;

controlling a treatment interval relative to an error value between the target quality value and the corresponding actual quality value of the fiber pulp; and

controlling the treatment pressure of the sharpening water jet to maintain the treatment interval within the control range in accordance with the adjustment strategy.

3. A method as claimed in claim 1 or 2, further comprising controlling at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to consumption of resources associated with the pulp grinder so as to prevent a power consumption of a motor for rotating the pulpstone of the pulp grinder, a pressure of a hydraulic fluid for moving a piston of the piston-loaded pulp grinder, and a power consumption of a drive for running a chain of the chain-feed grinder from exceeding an optimum limit.

4. A method as claimed in claim 1 or 2, wherein the quality value comprises a Canadian Standard Freeness (CSF) and the method further comprises changing at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to an error value between a target CSF value and an actual CSF value of the fiber pulp.

5. A method as claimed in claim 1 or 2, further comprising changing at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to one of a speed lack of a pressure shoe of the piston-loaded pulp grinder and a speed lack of a chain of the chain-feed pulp grinder.

6. A method as claimed in claim 1 or 2, further comprising changing at least one of the treatment pressure and the treatment interval of the sharp-

ening water jet in proportion to a saturation value of a power consumption of a motor for rotating the pulpstone of the pulp grinder.

7. A method as claimed in claim 1 or 2, further comprising changing at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to one of a saturation value of a pressure of a hydraulic fluid for moving a piston of the piston-loaded pulp grinder, and a saturation value of a power consumption of a drive for running a chain of the chain-feed grinder.

8. A method as claimed in claim 1 or 2, further comprising changing at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to a saturation value of a grinding speed control of the piston-loaded pulp grinder.

9. An apparatus for controlling a water jet sharpening sequence of a pulpstone in at least one of a piston-loaded pulp grinder and a chain-feed pulp grinder, the apparatus having at least one nozzle configured to be axially movable with respect to the pulpstone during sharpening thereof such that a width of the pulpstone is treated by a sharpening water jet, the sharpening water jet being pumped through a nozzle and sprayed therefrom by a pressure pump, directed against a surface of the pulpstone as the pulpstone is rotated, said apparatus comprising:

means for determining an actual quality value of at least one variable of the fiber pulp ground by the at least one of the piston-loaded pulp grinder and the chain-feed pulp grinder;

means for defining a target quality value for each of the at least one variable;

means for directing the actual quality value and the corresponding target quality value to a control unit of the water sharpening apparatus, the control unit being configured to be responsive thereto so as to provide an adjustment strategy, including a control range, for controlling the water jet sharpening sequence; and

a control unit configured to control the treatment pressure of the sharpening water jet relative to an error value between the target quality value and the corresponding actual quality value of the fiber

pulp, the control unit being further configured to control a treatment interval to maintain the treatment pressure within the control range in accordance with the adjustment strategy.

10. An apparatus for controlling a water jet sharpening sequence of a pulpstone in at least one of a piston-loaded pulp grinder and a chain-feed pulp grinder, the apparatus having at least one nozzle configured to be axially movable with respect to the pulpstone during sharpening thereof such that a width of the pulpstone is treated by a sharpening water jet, the sharpening water jet being pumped through a nozzle and sprayed therefrom by a pressure pump, directed against a surface of the pulpstone as the pulpstone is rotated, said apparatus comprising:

means for determining an actual quality value of at least one variable of the fiber pulp ground by the at least one of the piston-loaded pulp grinder and the chain-feed pulp grinder;

means for defining a target quality value for each of the at least one variable;

means for directing the actual quality value and the corresponding target quality value to a control unit of the water sharpening apparatus, the control unit being configured to be responsive thereto so as to provide an adjustment strategy, including a control range, for controlling the water jet sharpening sequence; and

a control unit configured to control a treatment interval relative to an error value between the target quality value and the corresponding actual quality value of the fiber pulp, the control unit being further configured to control the treatment pressure of the sharpening water jet to maintain the treatment interval within the control range in accordance with the adjustment strategy.

11. An apparatus as claimed in claim 9 or 10, wherein the control unit is further configured to control at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to consumption of resources associated with the pulp grinder so as to prevent a power consumption of a motor for rotating the pulpstone of the pulp grinder, a pressure of a hydraulic fluid for moving a piston of the piston-loaded pulp grinder, and a

power consumption of a drive for running a chain of the chain-feed grinder from exceeding an optimum limit.

12. An apparatus as claimed in claim 9 or 10, wherein the quality value comprises a Canadian Standard Freeness (CSF) and the control unit is further configured to change at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to an error value between a target CSF value and an actual CSF value of the fiber pulp.

13. An apparatus as claimed in claim 9 or 10, wherein the control unit is further configured to change at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to one of a speed lack of a pressure shoe of the piston-loaded pulp grinder and a speed lack of a chain of the chain-feed pulp grinder.

14. An apparatus as claimed in claim 9 or 10, wherein the control unit is further configured to change at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to a saturation value of a power consumption of a motor for rotating the pulpstone of the pulp grinder.

15. An apparatus as claimed in claim 9 or 10, wherein the control unit is further configured to change at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to one of a saturation value of a pressure of a hydraulic fluid for moving a piston of the piston-loaded pulp grinder, and a saturation value of a power consumption of a drive for running a chain of the chain-feed grinder.

16. An apparatus as claimed in claim 9 or 10, wherein the control unit is further configured to change at least one of the treatment pressure and the treatment interval of the sharpening water jet in proportion to a saturation value of a grinding speed control of the piston-loaded pulp grinder.